Amendments to the Specification

Replace the paragraph beginning at page 1, line 2, with the following amended paragraph:

The present application is a continuation application of and claims priority to U.S. Patent 6,915,869 ~~Application Serial Number 10/387,663,~~ filed March 10, 2003 ~~(Attorney Docket No. DP-300006div)~~, which is a divisional application of and claims priority to U.S. Patent 6,609,582 of Jean Joseph Botti, et al., filed April 19, 1999, entitled "Power Generation System and Method," both of which are hereby incorporated by reference herein in their entireties.

Replace the paragraph beginning at page 10, line 4, with the following amended paragraph:

Figure 2 shows an embodiment utilizing a free piston gas generator 200, wherein power is removed electrically through a linear alternator, with super rich homogenous charge compression ignition (HCCI) 201 to provide a hydrogen rich exhaust. Free piston gas generators have been described in the literature, such as in SAE Paper No. 98FL-486 by Van Blarigan et al. entitled "Homogeneous Charge Compression Ignition with a Free Piston: A New Approach to Ideal Otto Cycle Performance" which is herein incorporated by reference. Figure 2 shows the basic construction of a free piston gas generator 200 comprising pistons 202 connected via connecting rod 204 enclosed in cylinder casing 206, which forms the cylinder in which the pistons ride. Permanent magnet assembly 208 resides within cylinder casing 206 between linear alternator windings 210. Connecting rod 204 links the pistons 202 and permanent magnet assembly 208 into one solid unit. A novel approach to HCCI which forms part of this invention is the use of HCCI to enable extremely rich combustion. Super rich HCCI engines run at unusually rich equivalence ratios to generate very high hydrogen yield. In the present

system and method, this type of engine can be started lean for low emissions and then transitioned to super rich combustion when the SOFC is ready. Free piston gas generator 200 can be utilized as a compact, low friction engine for the present hybrid electric powertrains. If desired, other conventional crankshaft based engines may be utilized, with such features as high compression ratio, high intake temperature, supercharged or high exhaust gas recirculation, which features serve to enable HCCI.

Applicants refer to page 5 of the Amendment dated March 10, 2005 and repeat the correction to the Abstract here. Replace the Abstract beginning at page 24, line 2, with the following amended Abstract:

An extended rich mode engine configured and operated extremely rich of stoichiometric to produce a substantially continuous hydrogen rich engine exhaust. Oxygen enrichment devices further optimize production of hydrogen rich engine exhaust. Engines include a free piston gas generator with rich homogenous charge compression, a rich internal combustion engine cylinder system with an oxygen generator, and a rich inlet turbo-generator system with exhaust heat recovery. Oxygen enrichment devices to enhance production of hydrogen rich engine exhaust include pressure swing absorption with oxygen selective materials, and oxygen separators such as ~~an SOFC~~ a solid oxide fuel cell oxygen separator and a ceramic membrane oxygen separator.